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10/614,703	07/07/2003	Paul B. Cram		8160

7590 02/11/2005  
PAUL B. CRAM  
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MANSFIELD, GA 30055

EXAMINER

DEB, ANJAN K

ART UNIT PAPER NUMBER

2858

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/614,703

Applicant(s)

CRAM, PAUL B.

Examiner

Anjan K Deb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 1 and 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: The arrangement of specification does not conform to MPEP recommended practice (see below preferred layout for the specification).

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### ***Arrangement of the Specification***

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).

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- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Abstract***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- The abstract is objected to because it has more than one paragraph and exceeds 150 words.

### ***Brief Description of Drawings***

- Brief description of each drawing is required in the specification.
- In specification paragraph 008, "See Figure 3", should be changed to -See Figure 2--, because the circuit elements of Figure 2 are discussed here.

### ***Claim Objections***

2. Claims 1,2 are objected to because of the following informalities:

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- Each claim must be the object of a sentence. For example:

(Please see below suggested format for writing claims as per MPEP 608.01(m))

What I claim in my invention is:

1. A procedure carried out .....measurement procedures.
2. A unit of test equipment ..... frequency bands.

- Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations. In claim 2, delete the last sentence "It is fully described.....INVENTION"

Appropriate correction is required.

MPEP 608.01(m) [R-2] Form of Claims

The claim or claims must commence on a separate \*>physical sheet or electronic page< and should appear after the detailed description of the invention. >Any sheet including a claim or portion of a claim may not contain any other parts of the application or other material.< While there is no set statutory form for claims, the present Office practice is to insist that each claim must be the object of a sentence starting with "I (or we) claim," "The invention claimed is" (or the equivalent). If, at the time of allowance, the quoted terminology is not present, it is inserted by the \*\*>Office of Patent Publication<. Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

So long as the boundaries of the patent protection sought are set forth definitely, albeit negatively, the claim complies with the requirements of 35 U.S.C. 112, second paragraph. Some older cases were critical of negative limitations because they tended to define the invention in terms of what it was not, rather than pointing out the invention. In claim 2, the boundaries of the claimed invention are not set forth definitely because the positively recited claimed limitation "procedure carried out with the aid of special equipment, a procedure whereby impedance measurements can be made" is too broad.

#### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,2 are rejected under 35 U.S.C. 102(b) as being anticipated by Baker et al. (US 5,724,387).

Re claim 1, Baker et al. discloses procedure using special equipment (Fig. 1) for measuring impedance (impedance matching)(column 2 lines 35-40, 65-67, column 3 lines 1-2) of

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radio frequency equipment (digital receiver)(column 1, lines 10-30) elements automatically. Impedance measurement is made without the need for eye readings of calibration markings of dials or knobs and without the need for reference settings of equipment dials or knobs calculations to complete and without manual post measurement procedures is inherently disclosed because impedance measurement is made automatically using a computer (column 1 line 67).

Re claim 2, Baker et al. discloses digital RF-bridge comprising twin tee network (Fig. 2) for measuring impedance quantities in the radio frequency bands (300 MHz)(column 1 lines 19-21)(column 2, lines 36-40).

7. Claims 1,2 are rejected under 35 U.S.C. 102(b) as being anticipated by Wissell (US 4,859,952)

Re claims 1,2 Wissell discloses procedure using special equipment (Fig. 1) for measuring impedance of radio frequency equipment (column 1 lines 5-16) elements (13) automatically using a bridge circuit (12) and signal processing (digital) unit (16). Impedance measurement is made without the need for eye readings of calibration markings of dials or knobs and without the need for reference settings of equipment dials or knobs calculations to complete and without manual post measurement procedures is inherently disclosed because impedance measurement is made automatically.

### ***Conclusion***

8. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

### ***Pertinent Art***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Holt (US 6,486,679 B1) discloses apparatus and method for measuring impedance of radio frequency equipment by RF bridge circuit.

Kogut (US 5,485,100) discloses apparatus and method for measuring impedance by automatically balanced bridge circuit.

Wasburn (US 4,041,382) discloses special equipment for measuring impedance (electrical resistance) of radio frequency equipment (radio frequency transmitter) elements



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automatically without the need for eye readings of calibration markings of dials or knobs and without the need for reference settings of equipment dials or knobs calculations to complete and without manual post measurement procedures.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Anjan K. Deb whose telephone number is 571-272-2228. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lefkowitz Edwards can be reached at 571-272-2180.



**Anjan K. Deb**

Patent Examiner

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2/8/05

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